Baptiste PRAS

Bachelor student in Computer Science

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Currently in the Magistère in Computer Science at Université Paris-Saclay after completing a dual Bachelor's degree in Computer Science and Mathematics, I want to continue my studies in Natural Language Processing and Machine Learning, with the ambition to then pursue a PhD in these fields.

EDUCATION

Computer Science Magister — **Paris, France**

University Paris-Saclay *(GPA: 13.8/20)* — 2024-2025

- Selective and prestigious program
- Followed a reinforced curriculum with advanced computer science courses and a focus on artificial intelligence and distributed algorithms
- University ranked 1st worldwide in mathematics (Shanghai ranking), and 12th overall, highlighting its academic excellence

Dual Bachelor Degree in Computer Science and Mathematics — **Paris, France**

University Paris-Saclay *(GPA: 14.67/20 | 14.47/20)* — 2022-2024

- Integrated rigorous coursework in mathematics and computer science, providing a strong foundation in algebra, probability, data structures, and algorithms, and developed advanced skills in problem-solving and computational thinking

High School Baccalaureate — **Rumilly, France**

Démotz de la Salle High School *(GPA: 16.88/20)* — 2020-2022

- Specialization in mathematics and computer science, graduated with highest honors
- Participated in several Erasmus programs (Denmark, Croatia, Italy, Hungary)

English School — **New-York, USA**

EF New-York — 2019-2020

- Completed an intensive English immersion program, achieving C2 proficiency
- Developed independence, autonomy, and cultural openness by living alone in a foreign country at the age of 16

PROFESSIONAL EXPERIENCE

Supervised Research Project *(internship)* — **Paris, France**

LISN — January – April 2025

- Studied the impact of class imbalance in train and test sets on classification tasks performance, aiming to identify an optimal imbalance ratio different from 0.5
- Conducted experiments in Python, using Scikit-Learn, NumPy, and MatPlotLib
- Analyzed various class imbalance scenarios using a hand-coded spherical Teacher-Student perceptron, introducing different noise levels, using different loss functions and learning methods, such as gradient-based training and Langevin dynamics
- Generated and processed different types of data, primarily Gaussian distributions

Generative AI Trainer **Remote**
Outlier 2025

- Designed and refined prompts to enhance the performance of generative AI models
- Reviewed and corrected AI-generated outputs to ensure accuracy and quality
- Contributed to the continuous improvement of deep learning models through feedback and prompt optimization

Stock Associate *(summer job)* **Seyssel, France**
Carrefour Market 2021-2024

- Ensured optimal shelf stocking, provided customer assistance, and maintained high standards of store organization

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ACADEMIC PROJECTS

- **Spherical Teacher-Student Perceptron:** Implemented in Python a spherical Teacher-Student perceptron, entirely hand-coded using only NumPy, to analyze various class imbalance scenarios in train and test sets
- **Image Classification:** Developed a machine learning model to recognize specific traffic signs using supervised learning algorithms. Extracted data from pictures, pre-processed it and trained several models on it. Reached a performance of over 95%
- **Java-like Interpreter:** Made an interpreter based on Java, supporting various instructions, basic arithmetic, classes and methods. Implemented Java-like type checking. Coded in OCaml, Ocamllex and menhir
- **Various 2D Games:** Air Hockey in Python; Labyrinth creation and solving in Ocaml; Colt Express in Java; Termite Battle simulation in C++; Database library in C++

SKILLS AND INTERESTS

Hard Skills

- **Python:** Advanced, proficient in NumPy, MatPlotLib, Pandas, Seaborn, Scikit-Learn
- **C++/C:** Advanced
- **Ocaml, Java, SQL:** Intermediate
- **HTML, CSS, Processing:** Familiar with
- **Office Suite:** Word, PowerPoint, Excel

Languages

- **French:** Native language
- **English:** C2 proficiency - TOEFL: 108/120
- **Russian:** Basic knowledge (A2)
- **German:** Basic knowledge (A2)

Soft Skills

- **Teamwork, collaboration and leadership:** Developed through 15 years of basketball, including competition, coaching and refereeing
- **Work ethic:** Demonstrated punctuality and reliability working on previous jobs
- **Flexibility and adaptability:** Quick learner, easily adapting to new tools and priorities
- **Autonomy and initiative:** Experience living abroad, as well as professional experience in self-learning and complete independence

Interests

- **Basketball:** Practiced 15 years. Coached several teams and held a referee license
- **Algorithmic:** 5 years of practice in competitive programming. Finalist of the Prologin contest three times (38/106, 18/95, 23/112)